

Module 11

Cattle Viscera, Carcass, and Liver Disposition

Part II

This section is intended to identify and describe those conditions that are commonly seen while performing viscera inspection. Following each description, the inspector's action will be identified.

Inspection of the Abdominal Viscera

Abscesses are frequently detected during the palpation and observation of the rumino-reticular junction. These abscesses are usually localized and required only that the viscera be condemned. You should be alert though, to the overall condition of the carcass, and thoracic viscera. If abscesses are found in other locations, in addition to the abdominal viscera, it could be an indication of a generalized condition, in which case you would retain the carcass and all parts for the veterinarian to make a final disposition.

The mesenteric lymph nodes may show evidence of tuberculosis, neoplasms, and in some cases pigmentary color changes.

You must retain the carcass and all parts when you detect tuberculosis and tumors.

Most pigmentary color changes in the lymph nodes may be due to the animal's age or the environment in which the animal has been maintained and is usually of little concern. As with all abnormal conditions, though, if you are unsure of the cause or involvement of a condition, you would retain the carcass and parts for the final disposition by the veterinarian.

The small intestines may appear dark red to purple; this would indicate a condition called enteritis. The determination whether the condition is acute or chronic must be made by the veterinarian-therefore you should retain the carcass and *all* parts.

There are several other conditions detectable at the time you observe the abdominal viscera. These may vary from a slight redness or odor in the uterus or pyometra (metritis), to a retained placenta or fetus. In these instances you should evaluate the degree of involvement, the remaining viscera condition, the condition. When in doubt, "rail" it out!

Certainly evidence of adhesions may be seen. Again, if the condition appears localized, or chronic, and no further carcass or viscera involvement is observed,

the abdominal viscera would be condemned and the carcass retained for trimming.

Inspection of the Spleen

The inspection of the spleen is done by observation. Among conditions you may find is tuberculosis. Needless to say, this carcass and all parts will be retained for veterinary disposition.

Most often, though, you will see physical differences between normal and abnormal. There may be a definite swelling or size difference; perhaps the color will be different. You must stay alert to detect the abnormal spleen and when you detect it, you must retain it as well as the carcass and all parts.

The spleen is a very important organ to the veterinarian when making a final disposition on any carcass. You *must* always see to it that the spleen is included with the viscera whenever a carcass is retained for a disease condition.

Inspection of the Esophagus

The esophagus is also to be observed for *Cysticercus* (measles); eosinophilic myositis; and sometimes evidence of grub infestation. *Cysticercus* and EM conditions would require retention. Grub infestation is usually a localized condition requiring affected organs and areas be trimmed or condemned, but the carcass will usually be passed without retention.

Inspection of the Pluck (Lungs and Heart)

Pneumonia and pleuritis are the most common abnormalities observed. Acute pneumonia would usually be characterized by enlarged, edematous lymph nodes and/or dark red to purple sections or spots in the lung tissue. You would retain this carcass and all parts for the veterinarian.

A chronic pneumonia may be characterized by a localized abscess within the lungs, or many times evidence that the lung has become adhered to the pleura (lining of the thoracic cavity), frequently called pleuritis. You would make a close observation of the rest of the viscera and carcass to look for evidence that the condition is other than localized. For example, you may detect other sections of the carcass with swollen lymph nodes, or other adhesions. The carcass may appear degenerated, or in a run-down condition. There may be water tissue, fat sloughing, etc. Any of these would indicate a generalized condition. You will retain the carcass and all parts upon detecting a generalized condition. When the condition is strictly localized, the lungs would be condemned, as well as any contaminated organs, and the carcass retained for removal of the adhesions.

Tuberculosis may also be detected during incision of the lung's lymph nodes. (Refer to cattle head inspection for description of TB.) When TB lesions are detected, the carcass and all parts must be retained.

Another condition you may detect while incising the mediastinal lymph nodes is the thoracic granuloma. A granuloma may appear as an abscess or pus pocket in the lymph node. Unless directed to do otherwise, you would retain the viscera, especially the pluck, for the veterinarian to collect and submit samples of the granuloma lesion. The granuloma could be TB related.

Neoplasms (tumors) may be detected during palpation of the lungs. These tumors would appear as nodules or lumps in or on the lung tissue. The carcass and all parts would be retained.

Inspection of the Heart

The inspection of the heart requires some dexterity by the inspector. The heart is to be opened by an incision from the base to the apex, or vice-versa. The usual procedure is to position the heart in a manner that will allow you to safely cut away from your body, and incise the left ventricle about an inch and one-half posterior to the lefts of large vessels leading into the chamber. You would then grasp the opened edge of the ventricle and incise the septum. By rotating the knife 180 degrees with the cutting edge pointing up, you would complete opening the ventricles and great vessels with two incisions, causing the heart to lay flat or open. (If you wish to review the inspector's procedure for opening the heart, review the Postmortem Inspection Techniques module.) In some plants the heart may be inspected without being opened. If this is the case, a company employee must invert the heart for you to complete your inspection, and you would normally make a slight incision in the septum walls in addition to observing the inner heart surfaces. This procedure is difficult except on older animals, where the heart muscle is thinner and more pliable. The company employee will also re-invert the heart for you to observe the heart's outer surface.

Some of the conditions you may detect while inspecting the heart would include:

Cysticercus (tapeworm cysts, measles, etc.).

Eosinophilic myositis (EM).

Neoplasms (tumors).

Pericarditis (inflammation of the pericardium or heart sac). When an inflammation of the inner lining of the heart occurs, the condition is referred to as endocarditis.

Any of these conditions would require you to retain the viscera, carcass, and head for a veterinarian's disposition.

Because the scopes of conditions that can affect the cattle liver are many and there are also various degrees of involvement, liver inspection and disposition will be covered as a separate part of the module.

This gives you a basic background on what you may observe or detect during viscera inspection. As previously mentioned, these conditions are only some of the most common conditions you will be exposed to. There will undoubtedly be many others. Anytime you are in doubt about what abnormal condition you have detected; you should always "tag it out" for the veterinarian to make a final determination.

Tagging Procedure

The tagging procedure has been covered several times already but a brief review from the standpoint of the viscera inspection station follows. Upon detecting a condition you determine requires a veterinarian's decision, you would direct a company employee to remove all the viscera (i.e., thoracic viscera and abdominal viscera, including the spleen) into the disposition room. In some plants the viscera may be removed from a moving top table into a pan or container near the table. You would then place one of the four-sectioned retain tags on the thoracic viscera. You would *also* place one tag on *each* side of the carcass, usually on or near the sternum.

The carcass identification tag will be used to locate the corresponding head, which will be tagged with the remaining tag. You will need to know the usual procedure for retrieving the head, and if you are unsure, find out!

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SUPPLEMENT - PART II

Viscera [Common pathology and abnormalities]

Utilizing the previously covered information and/or Guideline #6, supply the following information:

1. Pleuritis

a. Usual site of infection _____

b. Appearance _____

2. Pneumonia

a. Usual site of infection _____

b. Appearance _____

3. Carcinoma

a. Usual sites of lesions _____

b. Appearance _____

4. Pericarditis

a. Usual sites of lesions _____

b. Appearance _____

5. Endocarditis

a. Usual site of infection _____

b. Appearance _____

6. Enteritis

a. Usual site of infection _____

b. Appearance _____
